MONTEREY ACCELERATED RESEARCH SYSTEM CABLED OBSERVATORY DRAFT ENVIRONMENTAL IMPACT REPORT/ENVIRONMENTAL IMPACT STATEMENT

PUBLIC MEETING

TRANSCRIPT OF PROCEEDINGS

SESSION 2

Taken on behalf of the Monterey Bay Aquarium Research Institute at 8272 Moss Landing Road, Moss Landing, California, before Melinda Nunley, CCR #9332, a Notary Public within and for the County of Monterey, State of California.

APPEARANCES:

Vicki Hill, Consultant for Monterey Bay Aquarium Research Institute

Michelle Brown, Project Manager for California Lands Commission

Keith Raybould, Monterey Bay Aquarium Research Institute

Jon Davidson, EIR/EIS Project Manager from Aspen Environmental Group

Marsha McNutt, Monterey Bay Aquarium Research Institute

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Moss Landing, California, Thursday, April 7, 2005

6:35 p.m.

MS. HILL: I think we'll get started here. Unlike our earlier meeting, we do have a member of the public here, so I'm going to give sort of an abbreviated introduction but we'll still want to go through the project description and the summary of the EIR/EIS. Sorry, guys. Anyway, welcome. Welcome all one of you.

MS. BROWN: One and all.

MS. HILL: Welcome to today's -- or this evening's meeting which is being held jointly by the California State Lands Commission and the Monterey Bay Marine Sanctuary. I think we all know the purpose of this meeting. I am a consultant to the Sanctuary. My name is Vicki Hill, and we are here to present information on the joint EIR/EIS for the MARS Cable Observatory Project which is being proposed by the Monterey Bay Aquarium Research Institute, MBARI. Did you sign in here?

MR. HART: Yes, I did.

MS. HILL: And would you like to fill out a speaker slip?

MR. HART: No, I can pass on that.

MS. HILL: Okay. Well, if you change your mind, you can fill out a speaker slip.

MR. HART: Unless you scare me with something you say, and I'm listening.

MS. HILL: Okay. And you know that if you don't make comments today, you have till April 26th to submit written comments.

MR. HART: Right.

MS. HILL: And you also have a copy of the EIR/EIS?

MR. HART: Yeah.

MS. HILL: Okay. Great. Other key agency and applicant and consultant staff that we have here today include Michelle Brown and Nancy Quesada from the State Lands Commission. On the applicant's side we have Keith Raybould and Mandy Allen. Keith will give us some details on the project description in a few minutes, and then our EIR/EIS consultant is Jon Davidson who is the project manager for Aspen Environmental Group and Aspen was responsible for preparing the EIR/EIS.

Okay. Just a little bit of background information on the whole joint EIR/EIS process. The application was filed in February of 2004 with both the State Lands Commission and the Sanctuary, and shortly after that the 2 agencies agreed to prepare a joint environmental review document to address the legislative -- or the legal requirements of both the state and the federal governments.

Since the proposed cable crosses both state and federal lands or waters, both the California Environmental Quality Act for the state and the National Environmental Policy Act for the federal government apply to this project. Since these 2 legal requirements are very similar, the agencies agreed to do a joint EIR/EIS. The document was prepared, as I mentioned, by Aspen Environmental Group under contract to the State Lands Commission and selected jointly by the Sanctuary and the State Lands Commission.

It's really important to point out that the EIR/EIS is not a decision document. It is purely an informational document. It's a full disclosure analysis presenting the environmental impacts of the proposed project as well as alternatives and it doesn't include recommendations on approval or denial of the project. Once the document is finalized, it will be up to state and federal decision makers to approve or deny the project and they must consider information in the EIR/EIS in making their decision.

Prior to starting the EIR/EIS, we conducted a process called scoping that was initiated last May. We solicited comments from interested agencies, public interest groups, Sanctuary user groups and interested individuals via a notice that was published in the Federal Register and mailed out to a rather long mailing list.

After the notice was sent out, we held scoping meetings last June here during which several fishermen and fishermen representatives spoke. As a result of the scoping process, we received 7 comment letters and they are summarized in Appendix B of the EIR/EIS.

Now we're at the stage of reviewing the Draft EIR/EIS. It was published March 11th and it's out for public review through April 26. After the close of the 45-day public review period, we will get together with the EIR/EIS consultant to prepare complete and thorough responses to each and every comment that's made on the document. Once those responses are completed, the Final EIR/EIS will be published which will include all the comments and all the responses. After the final document is released, each permitting agency will be required to take a separate action on the project so the joint process sort of ends there once the final document is published. The State Lands Commission, since it's the lead agency under CEQA, will take the first action among the state agencies, and the Sanctuary will take the federal action which is called a Record of Decision. There are other agencies that also have to act on the project, the Coastal Commission, Army Corps of Engineers, and I'm sure there's several others.

I think that's all I have for the -- the process.

We are expecting that the final document will come out in the first part of July and that a decision by the agencies will be made by August of this year.

I'll now turn it over to Michelle who will make some comments and then we'll hand the meeting over to Keith to go over the project description. Thanks.

MS. BROWN: Hi, my name's Michelle Brown. I'm with the State Lands Commission. I'm the project manager for this project. The purpose of this meeting is for you to receive information about the project and for us to hear your comments about the adequacy of the draft environmental document which was issued --

MR. DAVIDSON: March 11th.

MS. BROWN: -- March 11th. Yes. We have a sign-in sheet on the table in the back that we'd like you to complete for our records and also give your address if you'd like to be placed on the mailing list for future information on this project. Also there are speaker slips beside the sign-in sheet, and I would ask that each person who would like to comment on the project to please write your name and agency or your affiliation on the cards and bring them up to us at the front table. This will help the court reporter properly identify you for the record and will help us respond to your comments in the final document.

Sorry. Now Keith Raybould from MBARI will be presenting a description of the project, and following him, Jon Davidson will give the overall details of the environmental document.

MR. RAYBOULD: She said that hopefully. I wonder if the projector's been switched off.

I'm going to give a project description and I'm going to go through the proposed node location and cable routes, purpose and need for the project, a description of the node and the trawl resistant frame, the shore landing, the type of cable and the installation process and then finish with the schedule for the installation.

MARS route is shown here. It goes from Moss Landing across the north of the canyon. The node is located here on Smooth Ridge. There's 53 kilometers of cable which is about 30 miles of cable. The node is in approximately 3,000 feet of water depth. The shore landing here I'm going to describe in detail towards the end but the shore landing goes through a 5-inch horizontally directionally drilled steel pipe.

The purpose and need for the project, there's 2 major purposes. One is as a test bed for a larger facility that will be built in the future over the next few years. This other major project up off the Oregon/Washington coast is called NEPTUNE. It includes about 3,000 kilometers of

cable, approximately 30 nodes, and MARS will be a test bed for first of all testing the technology that will be used to build this NEPTUNE test bed. We have 50 kilometers of cable with a single node, but it's an important step towards realizing this larger facility later on which hopefully should start in about a year or 2. Once this regional cable observatory is built off Oregon/Washington, MARS will be used for testing the instruments, testing installation procedures for instruments on a regular basis over its lifetime prior to instruments being located and used on this cable observatory, NEPTUNE.

The other major purpose for MARS is for the support of science. It enables a whole new way of doing oceanography by providing power and band width which is very much in excess of what can be made available with stand-alone battery-powered instruments. Many different science applications being proposed for MARS. I'm just going to mention 2. This one here is the San Gregorio Fault and other fault lines that run across the bay. MARS will be located here. That will allow us to install a permanently powered seismometer to the west of the San Gregorio Fault. There are many instruments, hundreds in fact, on the east side. This will be the only seismometer located on the west of the fault, and this gives us some very valuable information on understanding the fault

mechanisms and the location of seismic activity in the region we live in.

This other one here is data from a hydrophone and MARS will be used to support a hydrophone. This is frequency and this is time. Here is signals from a whale call, so it can be used for monitoring whale migrations and patterns. This is seismic activity that was recorded. This is a passing ship. So this will allow continuous science capability for monitoring whale activities among other things. There are many other scientific activities proposed. I don't have time to go through all of them. The Monterey Cavity is very active and we will be able to instrument and try and understand what actually formed this canyon going into Moss Landing.

The cable itself will be buried to the maximum extent that we possibly can along the route. It's about 70, 75 percent will be buried. There's an area on the neck of Smooth Ridge where the substrate is too hard for the burial, but that's in the order of about 20 percent of the cable that cannot be buried.

The facility has been designed for a 25-year lifetime. During that lifetime new instruments will be continually designed in different places around the country and installed on MARS for testing. These instruments will be placed within a radius of 4 kilometers of the MARS node

on Smooth Ridge and connected by a very lightweight cable that will provide power to these instruments. The MARS node itself can support 8 of these cables to instruments within this radius. It will provide 10 kilowatts of power and gigabits of band width communication between these instruments and the shore, and this is, as I said, a magnitude more than what can be done at the moment with battery-powered instruments, so it will provide a whole new way of doing oceanography from the bay.

The node itself is in 2 pieces. There's this part here which is called the node. This is inserted inside the trawl resistant frame so it will be protected inside there. This is the cable that comes back to Moss Landing. These are the cables which go out to the individual instruments around the node. It's been designed in this way so the unit here is trawl resistant. The electronics, the light components are inside this node so that they can be easily brought back to shore for maintenance. There will be no need to bring the cable ship for repairs if there's problems with the electronics. We can bring this node back on a routine basis using the ships that are in and out and in operation daily from Moss Landing. This is the trawl resistant frame itself. It's being manufactured and you can see it matches up with the original design.

Shore landing, the shore landing is here. From

this position there'll be -- finally there'll be a very small hut there for the power supplies. From this location there will be a horizontally directionally drilled pipe that will be drilled from here across the Moss Landing harbor entrance along a distance of approximately 4700 feet to an exit location here. After drilling, the pipe that was used for drilling will be left in place. It's a 5-inch diameter steel pipe. The cable will enter the pipe at this location and then come through to the shore landing.

This is a cross section of the drill route. This is the entrance here. It actually goes approximately 50 feet below the ocean surface and the exit point is here 4700 feet, as I stated, to the other side of the canyon.

For cable installation, this is the vessel for cable installation. It's the Alcatel a cable laying vessel. The cable is approximately one inch in diameter. It's armored. It's single armored and a lightweight protected cable, and as I mentioned, it will be buried approximately 70 percent of the route.

The installation of the cable itself with this vessel will take 3 or 4 days. The node will take a further 2 or 3 days to install, and then we'll postlay inspect and do postlay burial of the cable where needed. That will take another 1 to 2 days. The schedule for the installation, the HDD we hope to start September 2005. The

node installation will then follow the HDD and we plan this in October/November this year, and we really want to get this installation completed before the gray whale southern migration comes about along the coast. The shore landing will be installed November/December ready for operations in early 2006. That's all I have for a project description. Any questions?

MS. HILL: No questions? Okay. Thanks, Keith.

Okay. Jon Davidson will take over to summarize the EIR/EIS findings.

MR. DAVIDSON: I'll just briefly summarize some of the highlights of the Environmental Impact Report/Environmental Impact Statement, and primarily I want to focus on what's critical in this type of document which is the impacts that are considered potentially significant.

First we started by -- with the decision to analyze these 9 issue areas on the screen. These were topics that, through the preliminary investigation of the project or the preliminary evaluation of the project by 2 lead agencies and through the scoping process that Vicki mentioned, these were topics that were potential leads to result in significant impacts, and as a result, the environmental document focused on just these topics in detail. It turned out not all of them resulted in significant impacts when it was finally analyzed. And then

in the second part, if you're interested, in the EIR, you can find explanations of the topics that weren't considered as significant and the reasons why they weren't analyzed.

The approach to the analysis of the Environmental Impact Report/Environmental Impact Statement is pretty standard if you're familiar with these types of documents. If we start in Section 4, which is the impact analysis, kind of the core of the document, for each topic we start by discussing current conditions and establish the baseline we're going to compare those impacts to. We're also investigating the critical regulations and describing those so you know what regulations are going to be applied to the project in addition to whatever is imposed through the EIR/EIS process or through the approval process that the project has to go through.

And in order to compare the impacts to current conditions and determine what's significant, which is the key consideration, we established significance criteria, and these are thresholds that we can use to determine whether an impact is significant. Basically if it meets or exceeds a threshold, then we consider that significant, and those are criteria that are developed by the 2 lead agencies in consultation with the EIR/EIS consultants. So the impacts are then identified and evaluated against those significance criteria, and for those impacts that trigger

the significance criteria, we identify them as potentially significant impacts and then we apply mitigation to those potentially significant impacts to determine if we can reduce those impacts back down to a level that is not significant.

There were 34 impacts identified in the Draft EIR/EIS. These include 2 types of impacts, those that are potentially significant but can be mitigated to less than significant level, what we call Class 2 impacts, and then Class 3 impacts were also identified, and those are impacts that are adverse but were not significant enough or were not large enough in magnitude or severity so that we would call them significant. We didn't have any impacts that are what we call Class 1 impacts which means that they are significant and cannot be reduced to a less than significant level.

So the 4 impacts that are potentially significant were in the 4 areas listed on the screen which are air quality, cultural resources marine vessel traffic and noise. As I said, all of these can be reduced to a less than significant level with the mitigation measures suggested in the Draft EIR/EIS. Since they're so few, I'm going to go through each one individually.

The first potentially significant impact relates to air quality, and this is an impact that is fairly

typical with construction activities, and that is that the various equipment, vehicles, in this case vessels, that are involved in the construction process will produce emissions from their operations, and based on the calculations in the document, a threshold established by the Monterey Bay Unified Air Pollution Control District will be exceeded, the daily threshold, and therefore, that's our trigger for considering the impact significant. The mitigation measures that are recommended by the air pollution control district, the first is to use certain types of low emission fuels for diesel vehicles. There are only certain vehicles that those can be applied to but there are certain fuels available that can help reduce the emissions, and the other is to contribute to various programs that are run by the Air Pollution Control District that don't reduce the impacts of this project but are paid into a program to offset other emissions in the region and have a positive effect on air quality.

The second impact is a cultural resources impact. Basically the applicant, MBARI, has done a good job of selecting a route that avoids any direct effects to known cultural resources, and the cultural resources we're currently concerned with in that regard is shipwrecks, so they've avoided any known shipwrecks and they've done reconnaissance of the route to make sure there are not any

unknown shipwrecks that they may have. So far there aren't any. The one concern, though, is that there could be prehistoric resources, and those are basically sites that may have been established when sea level was much lower and thousands of years ago Man may have used some of these areas that are now submerged and there may be some cultural resources, cultural resource sites along the path of the cable that haven't been identified so far, so the mitigation for that is to more closely examine the data that the applicant has already developed in the second route, but to look at it from a different point of view, and that's to combine the expertise of geologists and archeologists in that respect and see if there's anything that makes them think that there might be cultural resource sites there and determine if that's the case and so avoid those locations.

The other potentially significant impact is the cumulative risk of conflict with vessel operations out in the bay, and that has to do with the fact that the cabling vessel would have to operate near or potentially near operations of another research project which is a bore hole project which would be located in close proximity to the location of the science node, so if the 2 vessels are operating at the same time and in close proximity, that could be a potential problem and there's actually a

regulation that requires that vessels of this type, which are vessels of limited mobility, that there be a one mile buffer around each other, that these vessels should stay at least one nautical mile away. There's potential at least that the 2 projects could have vessels that are closer than that, so the mitigation is to schedule the operations but to continue to coordinate them so that there is not a need for the vessels to be operating at the same time in close proximity.

The final measure is a noise mitigation measure. This is for the terrestrial portion of the project which is the shore landing and the shore facility. There's horizontal directional drilling proposed as part of the coast project to bring the cable to shore through a conduit that Keith described, and due to the nature of the equipment that's being used, the noise levels from that equipment could exceed 85 decibels at a distance of 50 feet which is a threshold that's been established in the Monterey County Noise Control Ordinance as a significant level of noise for construction activities, and so because exceeding that threshold is possible, we called that impact significant. The mitigation is to muffle or shield the construction area. There's several techniques available. Any one or a combination of those could achieve noise reduction outside the construction area. So those are the

4 potentially significant impacts.

The other thing I wanted to mention briefly would be the alternatives we considered. The lead agencies and the applicant considered various alternatives, and there were actually 6 including the no project alternative where they would not move forward with the project at all. Those are the preliminary set of alternatives that we started from to examine them. Then we narrowed them down to 3 alternatives that seemed worthy to carry forth to full analysis, meaning that these are the alternatives that are feasible and capable of achieving the objectives of the project and also potentially avoid impacts that the proposed project might have. So those turned out to be the no action alternative and 2 alternative landing locations, so instead of landing in the method that's proposed right now, which is horizontal directional drilling through a conduit that extends offshore, to instead land the cable in a couple different ways I'll show you in a moment, and the -- it turns out that after we did the analysis, the impacts are fairly similar. They're slightly different, but not substantially different than the proposed project. And these are the 2 landing alternatives. The northerly one which is kind of the purple line is a variation on a landing concept that MBARI considered earlier which is to land the pipe -- or land the conduit -- excuse me, land the

cable through an existing pipe which is owned by Duke Energy. It's a pipe that's not used anymore but it's in good condition and extends out from the shore so that what they would do is to bring the cable to the end of that pipe, then pull the cable through the pipe and bring it to shore that way. This would still involve some horizontal directional drilling across -- beneath really the entrance to Moss Landing Harbor to get to the same location that the applicant proposes to land in the proposed project on the shore facility. The other alternatives are further to the south of the ridge line on the map, which is to basically cross the mouth of Monterey Canyon at the head of the canyon and parallel to shore to a location where Moss Landing Marine Laboratories is planning to construct a new pier. The cable would be brought to that pier, brought to shore along the pier to the MBARI facilities.

So that's -- that's the summary of the EIR/EIS. There's a lot more detail in the document but that's the highlights that we're focusing on, the significant impact effects.

MS. HILL: Okay. That brings us to the part of the agenda where we open it up for public comments, and I'm wondering if there's anyone here tonight who would like to make comments. Sure.

MR. HART: If I could, on the time line for

8-1

installation, October to November in 2005, commercial crab season opens on November 15th and it would be my guess between the jetty and where it exits off Smooth Ridge, you could probably encounter anywhere from 700 to 1200 crab traps, you know, unless you -- well, we set 18 hours before the opener, so you know, it would be my recommendation that you got it laid before then. Then you wouldn't have to deal with the crab traps.

8-1, cont.

MS. HILL: And how long is the crab season?

MR. HART: It stays open until June, but most of the activity there, we catch about 60 to 80 percent of our crabs in the first month generally, but there will be traffic, and where it goes inside of Pajaro Hole and all the way across the flat to Soquel Hole is -- I named it the Honey Hole years ago because I made a fortune there a couple times, but there is a lot of crab where that's going to cross, and you know, I would recommend that you got it done before that date. Then you wouldn't have to deal with it.

MR. DAVIDSON: Can I just ask, for sure the crab season starts November 15? Doesn't it kind of vary a little bit?

MR. HART: Unless they go on strike. No, that's set in stone. It isn't like salmon season. It opens November 15th here and then from Sonoma County line north

it opens on December 1st. So we have an early opener down here for the crab, an early start. I generally fish tuna off the Oregon/Washington coast and I've been up there when they are laying cable like in some of the other pictures that we saw, and I know that they hired commercial boats to be sort of like a liaison to other boats in the area to monitor traffic and to communicate with them, and I think that would be a good idea to do here since it's been done in other areas.

MS. HILL: Could you do me a favor and state your name clearly for the court reporter here?

MR. HART: My name is Tom Hart and I'm president of the Moss Landing Fishermen's Association.

MS. HILL: Great. Thank you.

MR. HART: We will write a written comment also.

I had a question on the hydrophone and you were talking about whales and being able to pick up their sounds. My -- I was just curious if you can -- if they can identify individual whales and has that ever been used as a way to count to see how many whales there are? **8-2**

MS. McNUTT: Absolutely. They have distinct sonograms.

MR. HART: And then like I said earlier, I think the landing -- the alternative 2, I know that the bottom sand moves there a lot and that cable would be exposed from **8-3**

time to time. I don't think that would be a good area.

That's all I picked out, but the most important thing that I can see is that the work got done before November 15th and it would save a lot of grief. I don't like fishing around the cable but I wouldn't want to have my gear there because the fact is while the Point Sur was doing a lot of mapping this couple months ago up off of the Pigeon and stuff, they were dragging my crab gear all around the ocean. I had to go find it 2 or 3 miles from where I put it. They were very good about avoiding them in the daytime, but they were in there at nighttime too and they were in the gear all the time.

8-3, cont.

MS. BROWN: Keith, would you like to elaborate on the hydrophone?

MR. RAYBOULD: I know that I've done a workshop where they talked about bringing the cable observatory up in the Arctic, and the -- that some of the scientists there who were monitoring whales were really enthusiastic about having the cable observatory there because they would be able to monitor the whales passing through various breaking ice across in the Arctic and they were very excited about that, and they thought that that was one of the best ways that they could actually monitor migrating whales and what was happening to them and their migrating patterns, so I think it could be pretty valuable.

MR. HART: Another thing is like when we go fishing, we, you know, put a certain amount of curve in our lines to attract fish, and I think it would be a good test to -- after the cable's laid, to monitor its path for a leaking current and stuff because, you know, it could -- it could be something that attracts fish, and doesn't matter if it's insulated or not. If it's there, you know, Murphy's law happens. 8-4

MR. RAYBOULD: Yes, good idea.

MS. HILL: Okay. Thanks.

Any other public comments, please come forward. And just as a reminder, if you don't make comments tonight, you still have until April 26 to submit written comments to either the State Lands Commission or to the Sanctuary.

MS. BROWN: Either fax, email or mail them in.

MS. HILL: Anything else? Why don't you do the honors?

MS. BROWN: The meeting is now closed.

(The meeting concluded at 7:10 p.m.)

STATE OF CALIFORNIA)
) ss.
COUNTY OF SANTA CRUZ)

I, MELINDA NUNLEY, a Certified Shorthand Reporter, License Number 9332, and a Notary Public in and for the State of California, do hereby certify:

That the said Transcript of Proceedings was reported by me in machine shorthand at the time and place therein named and was thereafter transcribed by means of computer-aided transcription, and the same is a true, correct and complete transcript of said proceedings, to the best of my ability.

I further certify that I am not of counsel nor related to any of the parties hereto, nor in any way interested in the outcome of these proceedings.

IN WITNESS WHEREOF, I have hereunto subscribed my name and affixed my official seal this 14th day of April 2005.

_____
Certified Shorthand Reporter
and Notary Public